U1245-3

CIBCR

# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
Columbia University Business School, New York, New York 10027 (212) 280-2916

Dr. Geoffrey H. Moore, Director

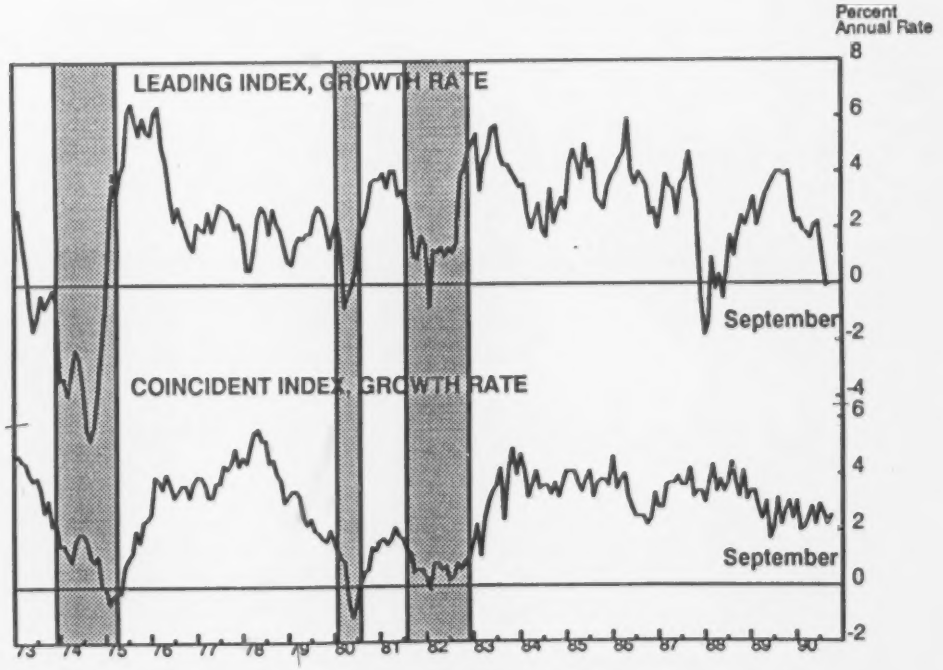
October 1990

## SERVICES LEADING INDEX STAGNANT

The leading index of service sector activity, compiled by the Columbia Business School's Center for International Business Cycle Research (CIBCR), rose marginally from a revised 156.3 in August to 156.5 in September, while its smoothed annualized growth rate edged up from a revised -0.1% to 0.0%. The rise was caused by increases in the average workweek in services and construction contracts for commercial buildings, almost wholly offset by drops in stock prices and profit margins in services.

The coincident index of service sector activity also rose a bit, from a revised 193.1 in August to 193.8 in September, raising its annualized growth rate from a revised 2.2% in August to 2.5% in September. The rise was caused by increases in employee hours and personal consumption expenditures in services, partially offset by a drop in labor income in services.

While no dramatic developments appear to be on the horizon, the continuing weakness in the leading index is consistent with a likely slowdown in growth of services activity.




Shaded areas represent business cycle recessions.

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87=100) | Index of Profit Margins, Services (1982=100) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1989: | | | | | | |
| Jan. | 152.1 | 3.1 | 32.91 | 886 | 95.2 | 112.5 |
| Feb. | 151.7 | 2.1 | 32.71 | 730 | 98.7 | 113.1 |
| Mar. | 152.3 | 2.6 | 32.74 | 783 | 98.5 | 113.6 |
| Apr. | 153.1 | 3.2 | 32.87 | 772 | 102.5 | 113.0 |
| May | 153.7 | 3.5 | 32.70 | 806 | 108.0 | 114.3 |
| June | 154.4 | 3.8 | 32.71 | 840 | 111.6 | 114.3 |
| July | 155.0 | 4.0 | 32.80 | 779 | 116.5 | 113.7 |
| Aug. | 155.4 | 4.0 | 32.67 | 778 | 121.9 | 114.6 |
| Sept. | 155.8 | 3.9 | 32.74 | 818 | 122.1 | 113.8 |
| Oct. | 156.3 | 4.0 | 32.81 | 808 | 122.6 | 113.8 |
| Nov. | 155.8 | 2.8 | 32.69 | 717 | 120.1 | 114.2 |
| Dec. | 155.7 | 2.2 | 32.69 | 638 | 120.6 | 113.8 |
| 1990: | | | | | | |
| Jan. | 156.2 | 2.3 | 32.61 | 810 | 116.5 | 114.6 |
| Feb. | 156.2 | 1.9 | 32.74 | 731 | 112.1 | 114.2 |
| Mar. | 156.5 | 1.8 | 32.76 | 690 | 114.6 | 113.8 |
| Apr. | 156.7 | 1.6 | 32.81 | 655 | 113.8 | 113.9 |
| May | 157.4 | 2.1 | 32.76 | 712 | 117.3 | 114.4 |
| June | 157.8 | 2.2 | 32.83 | 658 | 121.2 | 113.8 |
| July | 157.1 | 1.0 | 32.78 | 519 | 118.5 | 113.8 |
| Aug. | 156.3r | -0.1r | 32.66r | 558 | 106.0 | 114.2r |
| Sept. | 156.5 | 0.0 | 32.75 | 581 | 100.1 | 114.1 |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1989: | | | | | | |
| Jan. | 186.4 | 3.4 | 1895.0 | 1289.8 | 686.2 | 111.5 |
| Feb. | 186.4 | 2.8 | 1896.6 | 1301.5 | 682.0 | 111.2 |
| Mar. | 186.4 | 2.4 | 1898.6 | 1296.2 | 684.7 | 111.2 |
| Apr. | 187.5 | 3.0 | 1900.5 | 1301.9 | 689.5 | 112.5 |
| May | 186.7 | 1.7 | 1902.5 | 1301.5 | 684.2 | 111.5 |
| June | 187.5 | 2.1 | 1909.5 | 1304.0 | 687.0 | 112.2 |
| July | 188.8 | 3.1 | 1916.5 | 1311.7 | 694.4 | 113.2 |
| Aug. | 188.4 | 2.2 | 1923.5 | 1313.6 | 691.8 | 112.2 |
| Sept. | 189.2 | 2.7 | 1928.9 | 1316.2 | 696.8 | 112.8 |
| Oct. | 190.0 | 3.0 | 1934.3 | 1319.3 | 699.6 | 113.6 |
| Nov. | 189.8 | 2.4 | 1939.7 | 1318.4 | 697.7 | 113.4 |
| Dec. | 190.8 | 3.0 | 1941.0 | 1333.7 | 700.4 | 113.9 |
| 1990: | | | | | | |
| Jan. | 190.2 | 2.0 | 1942.4 | 1318.8 | 695.5 | 114.6 |
| Feb. | 190.6 | 2.1 | 1943.7 | 1323.2 | 697.6 | 114.6 |
| Mar. | 191.3 | 2.4 | 1946.6 | 1330.5 | 702.2 | 114.9 |
| Apr. | 192.1 | 2.8 | 1949.6 | 1336.9 | 705.5 | 115.5 |
| May | 191.9 | 2.2 | 1952.5 | 1336.6 | 705.5 | 115.0 |
| June | 193.0r | 2.9r | 1958.9 | 1349.1 | 707.7 | 115.8 |
| July | 193.2r | 2.6r | 1965.2 | 1352.5r | 708.9 | 115.6 |
| Aug. | 193.1r | 2.2r | 1971.6 | 1357.8r | 704.4r | 115.3r |
| Sept. | 193.8 | 2.5 | n.a. | 1362.8 | 703.9 | 116.2 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.
r = revised.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.
4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.
5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.
6. This series is constructed by CIBCR using the price deflator for services consumption, labor income, and an experimental monthly services output index developed by the Federal Reserve Board.
9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.
11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.
12. Bureau of Labor Statistics, all employees.

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# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
Columbia University Business School, New York, New York 10027 (212) 280-2916

**Dr. Geoffrey H. Moore, Director**

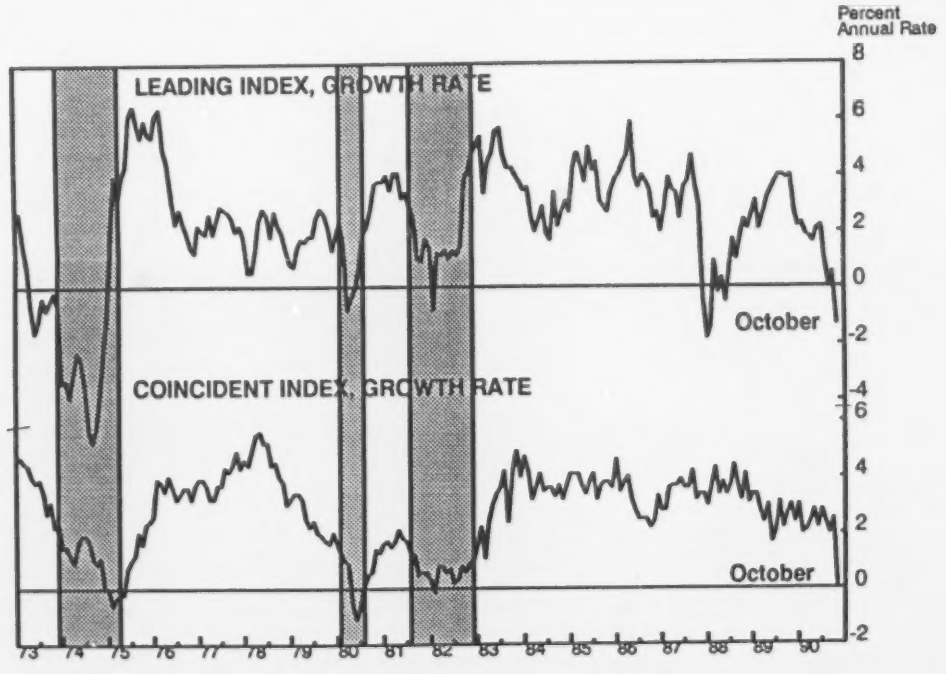
**November 1990**

## SERVICES LEADING INDEX GROWTH TURNS NEGATIVE

The leading index of service sector activity, compiled by the Columbia Business School's Center for International Business Cycle Research (CIBCR), dropped from a revised 156.9 in September to 155.5 in October, while its annualized growth rate dropped from a revised 0.5% in September to -1.3% in October. The decline was caused by drops in construction contracts for commercial buildings and the average workweek and stock prices in services, partly offset by a rise in profit margins in services.

The coincident index of service sector activity also fell, from 193.8 in September to 191.7 in October, while its smoothed annualized growth rate dropped from 2.5% in September to just 0.1% in October – the lowest growth rate since the last recession. The decline was caused by drops in labor income and employee hours in services, offset in part by a small rise in personal consumption expenditures in the service sector.

Although the greater importance of services in the economy and their tendency to grow even during recessions has helped make recessions milder in recent times, they do participate in recessions by growing more slowly. As our leading index shows, that story is now likely to be repeated once again. Dr Geoffrey H. Moore, Director, observed that in the severe recession of 1982 the growth rates in the services indexes did not get any lower than they are now.




Shaded areas represent business cycle recessions.

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87=100) | Index of Profit Margins, Services (1982=100) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1989: | | | | | | |
| Apr. | 153.1 | 3.2 | 32.87 | 772 | 102.5 | 113.0 |
| May | 153.7 | 3.5 | 32.70 | 806 | 108.0 | 114.3 |
| June | 154.4 | 3.8 | 32.71 | 840 | 111.6 | 114.3 |
| July | 155.0 | 4.0 | 32.80 | 779 | 116.5 | 113.7 |
| Aug. | 155.4 | 4.0 | 32.67 | 778 | 121.9 | 114.6 |
| Sept. | 155.8 | 3.9 | 32.74 | 818 | 122.1 | 113.8 |
| Oct. | 156.3 | 4.0 | 32.81 | 808 | 122.6 | 113.8 |
| Nov. | 155.8 | 2.8 | 32.69 | 717 | 120.1 | 114.2 |
| Dec. | 155.7 | 2.2 | 32.69 | 638 | 120.6 | 113.8 |
| 1990: | | | | | | |
| Jan. | 156.2 | 2.3 | 32.61 | 810 | 116.5 | 114.6 |
| Feb. | 156.2 | 1.9 | 32.74 | 731 | 112.1 | 114.2 |
| Mar. | 156.5 | 1.8 | 32.76 | 690 | 114.6 | 113.8 |
| Apr. | 156.7 | 1.6 | 32.81 | 655 | 113.8 | 113.9 |
| May | 157.4 | 2.1 | 32.76 | 712 | 117.3 | 114.4 |
| June | 157.8 | 2.2 | 32.83 | 658 | 121.2 | 113.8 |
| July | 157.1 | 1.0 | 32.78 | 519 | 118.5 | 113.8 |
| Aug. | 156.4r | 0.0r | 32.66 | 558 | 106.0 | 114.4r |
| Sept. | 156.9r | 0.5r | 32.92r | 581 | 100.1 | 113.6r |
| Oct. | 155.5 | -1.3 | 32.43 | 521 | 98.0 | 115.4 |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1989: | | | | | | |
| Apr. | 187.5 | 3.0 | 1900.5 | 1301.9 | 689.5 | 112.5 |
| May | 186.7 | 1.7 | 1902.5 | 1301.5 | 684.2 | 111.5 |
| June | 187.5 | 2.1 | 1909.5 | 1304.0 | 687.0 | 112.2 |
| July | 188.8 | 3.1 | 1916.5 | 1311.7 | 694.4 | 113.2 |
| Aug. | 188.4 | 2.2 | 1923.5 | 1313.6 | 691.8 | 112.2 |
| Sept. | 189.2 | 2.7 | 1928.9 | 1316.2 | 696.8 | 112.8 |
| Oct. | 190.0 | 3.0 | 1934.3 | 1319.3 | 699.6 | 113.6 |
| Nov. | 189.8 | 2.4 | 1939.7 | 1318.4 | 697.7 | 113.4 |
| Dec. | 190.8 | 3.0 | 1941.0 | 1333.7 | 700.4 | 113.9 |
| 1990: | | | | | | |
| Jan. | 190.2 | 2.0 | 1942.4 | 1318.8 | 695.5 | 114.6 |
| Feb. | 190.6 | 2.1 | 1943.7 | 1323.2 | 697.6 | 114.6 |
| Mar. | 191.3 | 2.4 | 1946.6 | 1330.5 | 702.2 | 114.9 |
| Apr. | 192.1 | 2.8 | 1949.6 | 1336.9 | 705.5 | 115.5 |
| May | 191.9 | 2.2 | 1952.5 | 1336.6 | 705.5 | 115.0 |
| June | 192.9r | 2.8r | 1958.1r | 1349.1 | 707.7 | 115.8 |
| July | 193.0r | 2.4r | 1963.7r | 1347.1r | 708.9 | 115.6 |
| Aug. | 192.9r | 2.0r | 1969.3r | 1353.7r | 704.4 | 115.2r |
| Sept. | 193.8 | 2.5 | n.a. | 1356.0r | 707.8r | 116.2 |
| Oct. | 191.7 | 0.1 | n.a. | 1358.2 | 694.3 | 114.6 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

r = revised.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.

4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.

5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.

6. This series is constructed by CIBCR using the price deflator for services consumption, labor income, and an experimental monthly services output index developed by the Federal Reserve Board.

9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.

11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.

12. Bureau of Labor Statistics, all employees.

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# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
Columbia University Business School, New York, New York 10027 (212) 280-2916

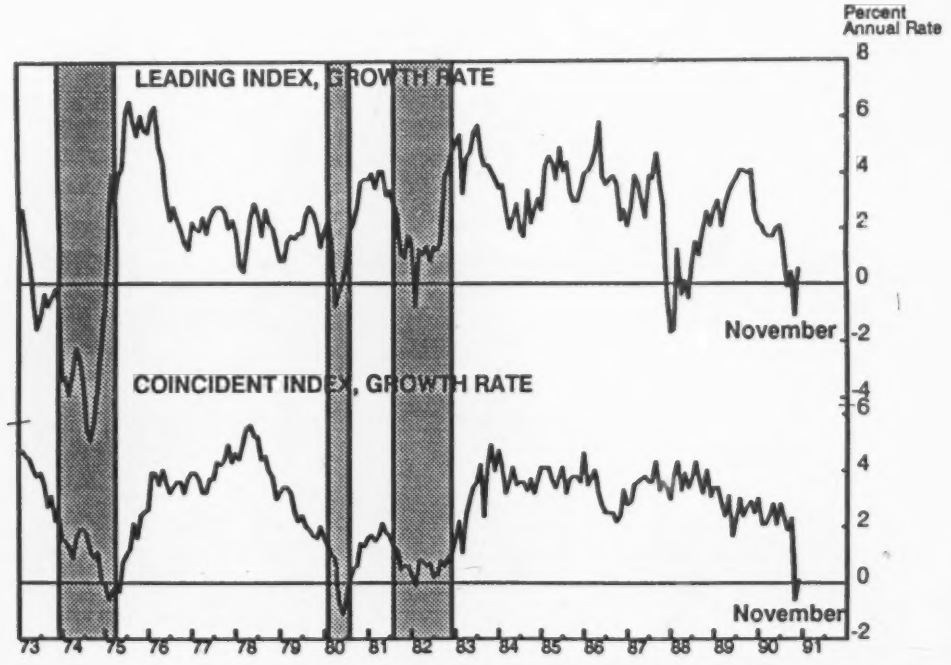
**Dr. Geoffrey H. Moore, Director**

**December 1990**

## SERVICES INDEXES BOUNCE BACK A BIT

The leading index of service sector activity, compiled by the Columbia Business School's Center for International Business Cycle Research (CIBCR), rose from a revised 155.7 in October to 157.0 in November, pulling its annualized growth rate up from a revised -1.1% in October to 0.5% in November. The rise was caused by a significant rise in services stock prices and small rises in the average workweek in services and construction contracts for commercial buildings, offset in part by a decline in profit margins in services.

The coincident index of service sector activity also rose, from a revised 191.0 in October to 191.8 in November, while its annualized growth rate rose from a revised -0.6% in October to 0.1% in November. The rise was caused by increases in labor income and employee hours in services, partly offset by a drop in personal consumption expenditures in the service sector.




Shaded areas represent business cycle recessions.

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87=100) | Index of Profit Margins, Services (1982=100) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1989: | | | | | | |
| July | 155.1r | 4.1r | 32.80 | 802r | 116.5 | 114.0r |
| Aug. | 155.5r | 4.1r | 32.67 | 802r | 121.9 | 114.5r |
| Sept. | 155.9r | 4.0r | 32.74 | 832r | 122.1 | 113.9r |
| Oct. | 156.5r | 4.1r | 32.81 | 848r | 122.6 | 113.9r |
| Nov. | 155.8 | 2.7r | 32.69 | 733r | 120.1 | 114.1r |
| Dec. | 155.8r | 2.2 | 32.69 | 689r | 120.6 | 113.7r |
| 1990: | | | | | | |
| Jan. | 156.1r | 2.1r | 32.61 | 803r | 116.5 | 114.4r |
| Feb. | 156.2 | 1.8r | 32.74 | 722r | 112.1 | 114.2 |
| Mar. | 156.5 | 1.7r | 32.76 | 704r | 114.6 | 113.9r |
| Apr. | 156.8r | 1.7r | 32.81 | 671r | 113.8 | 113.8r |
| May | 157.4 | 2.0r | 32.76 | 710r | 117.3 | 114.4 |
| June | 157.8 | 2.1r | 32.83 | 659r | 121.2 | 113.8 |
| July | 157.3r | 1.2r | 32.78 | 536r | 118.5 | 114.0r |
| Aug. | 156.4 | -0.1r | 32.66 | 574r | 106.0 | 114.2r |
| Sept. | 156.9 | 0.4r | 32.92 | 576r | 100.1 | 113.6 |
| Oct. | 155.7r | -1.1r | 32.41r | 528r | 98.0 | 116.2r |
| Nov. | 157.0 | 0.5 | 32.65 | 553 | 102.0 | 115.2 |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1989: | | | | | | |
| July | 188.7r | 3.0r | 1916.5 | 1311.7 | 692.9r | 113.2 |
| Aug. | 188.5r | 2.4r | 1923.5 | 1313.6 | 692.3r | 112.2 |
| Sept. | 189.2 | 2.7 | 1928.9 | 1316.2 | 696.4r | 112.8 |
| Oct. | 189.9r | 2.9r | 1934.3 | 1319.3 | 698.6r | 113.6 |
| Nov. | 189.9r | 2.5r | 1939.7 | 1318.4 | 698.1r | 113.4 |
| Dec. | 190.8 | 3.0 | 1941.0 | 1333.7 | 700.8r | 113.9 |
| 1990: | | | | | | |
| Jan. | 190.3r | 2.1r | 1942.4 | 1318.8 | 696.6r | 114.6 |
| Feb. | 190.6 | 2.1 | 1943.7 | 1323.2 | 697.6 | 114.6 |
| Mar. | 191.3 | 2.4 | 1946.6 | 1330.5 | 701.5r | 114.9 |
| Apr. | 192.1 | 2.8 | 1949.6 | 1336.9 | 706.0r | 115.5 |
| May | 191.8r | 2.1r | 1952.5 | 1336.6 | 705.1r | 115.0 |
| June | 192.9 | 2.8 | 1957.4r | 1349.1 | 707.6r | 115.8 |
| July | 192.9r | 2.3r | 1962.4r | 1347.7r | 707.2r | 115.6 |
| Aug. | 192.8r | 1.9r | 1967.3r | 1351.5r | 705.3r | 115.2 |
| Sept. | 193.6r | 2.3r | n.a. | 1353.2r | 706.9r | 116.3r |
| Oct. | 191.0r | -0.6r | n.a. | 1352.8r | 690.5r | 114.4r |
| Nov. | 191.8 | 0.1 | n.a. | 1351.0 | 695.5 | 115.2 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

r = revised.

Cols. 1,2,4 and 6 are revised because of revisions in Construction Contracts and Profit Margins

Cols. 7,8 and 11 are revised because of a revised seasonal adjustment for Labor Income.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.

4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.

5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.

6. This series is constructed by CIBCR using the price deflator for services consumption, labor income, and an experimental monthly services output index developed by the Federal Reserve Board.

9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.

11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.

12. Bureau of Labor Statistics, all employees.

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# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
Columbia University Business School, New York, New York 10027 (212) 280-2916

**Dr. Geoffrey H. Moore, Director**

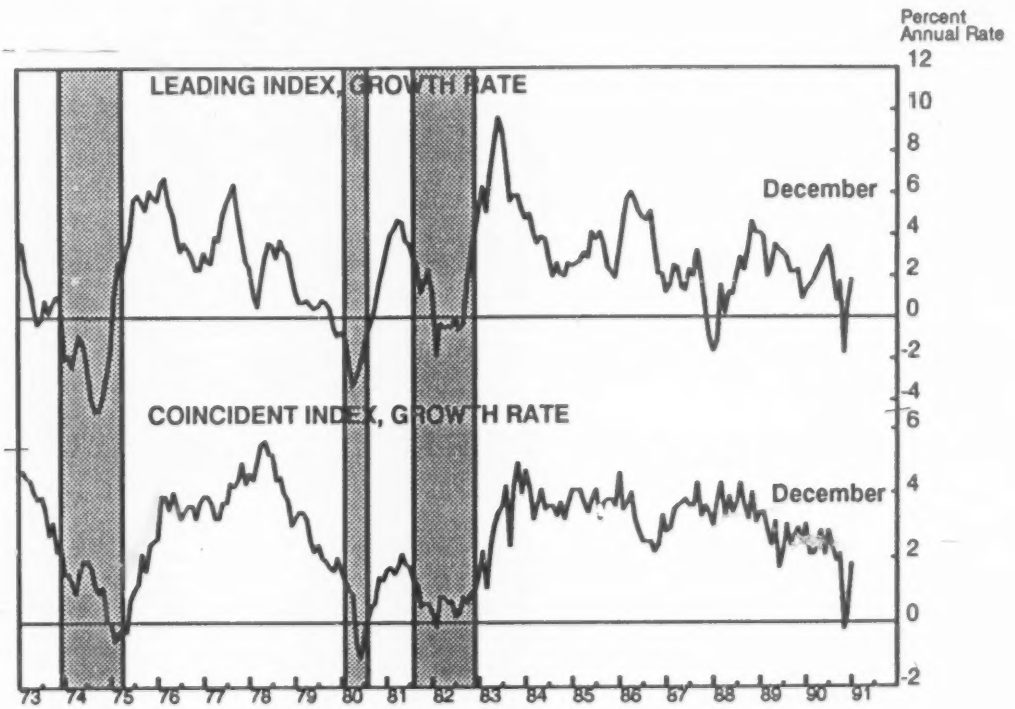
**January 1991**

## SERVICES INDEXES UP AGAIN

The leading index of service sector activity, compiled by the Columbia Business School's Center for International Business Cycle Research (CIBCR), rose from a revised 165.3 in November to 166.6 in December, pushing its smoothed annualized growth rate up from a revised 0.6% in November to 1.8% in December. The rise was caused by increases in the average workweek and stock prices for the service sector, partly offset by a troubling drop in construction contracts for commercial buildings to a 15-year low.

The coincident index of service sector activity also rose nearly two points from a revised 192.0 in November to 193.7 in December, raising its smoothed annualized growth rate from a revised 0.3% in November to 1.8% in December. The rise was caused by increases in all available components, namely, personal consumption expenditures, labor income, and employee hours in the service sector.

The second successive rise in both indexes, particularly the significant rises in December, is a hopeful sign for future services activity.




Shaded areas represent business cycle recessions.

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87=100) | Profit Margins, Services (cents per dollar) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1989: | | | | | | |
| Sept. | 163.2r | 2.2r | 32.74 | 832 | 122.1 | 4.37 |
| Oct. | 163.6r | 2.3r | 32.81 | 849r | 122.6 | 4.29 |
| Nov. | 162.7r | 0.9r | 32.69 | 735r | 120.1 | 4.22 |
| Dec. | 163.2r | 1.3r | 32.69 | 690r | 120.6 | 4.29 |
| 1990: | | | | | | |
| Jan. | 163.6r | 1.5r | 32.61 | 813r | 116.5 | 4.36 |
| Feb. | 164.1r | 1.8 | 32.74 | 734r | 112.1 | 4.44 |
| Mar. | 164.8r | 2.2r | 32.76 | 705r | 114.6 | 4.49 |
| Apr. | 165.5r | 2.6r | 32.81 | 718r | 113.8 | 4.54 |
| May | 166.2r | 3.1r | 32.76 | 728r | 117.3 | 4.59 |
| June | 166.8r | 3.4r | 32.83 | 665r | 121.2 | 4.57 |
| July | 166.2r | 2.3r | 32.78 | 548r | 118.5 | 4.54 |
| Aug. | 165.1r | 0.8r | 32.66 | 574 | 106.0 | 4.51 |
| Sept. | 166.1r | 1.7r | 32.92 | 585r | 100.1 | n.a. |
| Oct. | 163.3r | -1.7r | 32.39r | 550r | 98.0 | n.a. |
| Nov. | 165.3r | 0.6r | 32.62r | 552r | 102.0 | n.a. |
| Dec. | 166.6 | 1.8 | 32.87 | 410 | 107.8 | n.a. |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1989: | | | | | | |
| Sept. | 189.2 | 2.7 | 1928.9 | 1316.2 | 696.4 | 112.8 |
| Oct. | 189.9 | 2.9 | 1934.3 | 1319.3 | 698.6 | 113.6 |
| Nov. | 189.9 | 2.5 | 1939.7 | 1318.4 | 698.1 | 113.4 |
| Dec. | 190.8 | 3.0 | 1941.0 | 1333.7 | 700.8 | 113.9 |
| 1990: | | | | | | |
| Jan. | 190.3 | 2.1 | 1942.4 | 1318.8 | 696.6 | 114.6 |
| Feb. | 190.6 | 2.1 | 1943.7 | 1323.2 | 697.6 | 114.6 |
| Mar. | 191.3 | 2.4 | 1946.6 | 1330.5 | 701.5 | 114.9 |
| Apr. | 192.1 | 2.8 | 1949.6 | 1336.9 | 706.0 | 115.5 |
| May | 191.8 | 2.1 | 1952.5 | 1336.6 | 705.1 | 115.0 |
| June | 192.9 | 2.8 | 1957.4 | 1349.1 | 707.6 | 115.8 |
| July | 192.9 | 2.3 | 1962.4 | 1347.7 | 707.2 | 115.6 |
| Aug. | 192.8 | 1.9 | 1967.3 | 1351.5 | 705.3 | 115.2 |
| Sept. | 193.4r | 2.1r | 1967.7 | 1353.2 | 706.9 | 116.3 |
| Oct. | 191.3r | -0.2r | 1968.2 | 1350.3r | 690.1r | 114.4 |
| Nov. | 192.0r | 0.3r | 1968.6 | 1348.6r | 695.9r | 115.1r |
| Dec. | 193.7 | 1.8 | n.a. | 1360.3 | 703.2 | 116.0 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

r = revised.

Cols. 1,2,4 and 6 are revised because of revisions in Construction Contracts and a new series for Profit Margins.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.

4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.

5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.

6. This quarterly series is (1) corporate profits with inventory valuation and without capital consumption adjustments for transportation and public utilities, wholesale and retail trade, finance, insurance and real estate, and services, divided by (2) gross national product for services, both in current dollars as compiled by the Department of Commerce. Quarterly data are interpolated by CIBCR.

9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.

11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.

12. Bureau of Labor Statistics, all employees.

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U1245-3

# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
Columbia University Business School, New York, New York 10027 (212) 280-2916

**Dr. Geoffrey H. Moore, Director**

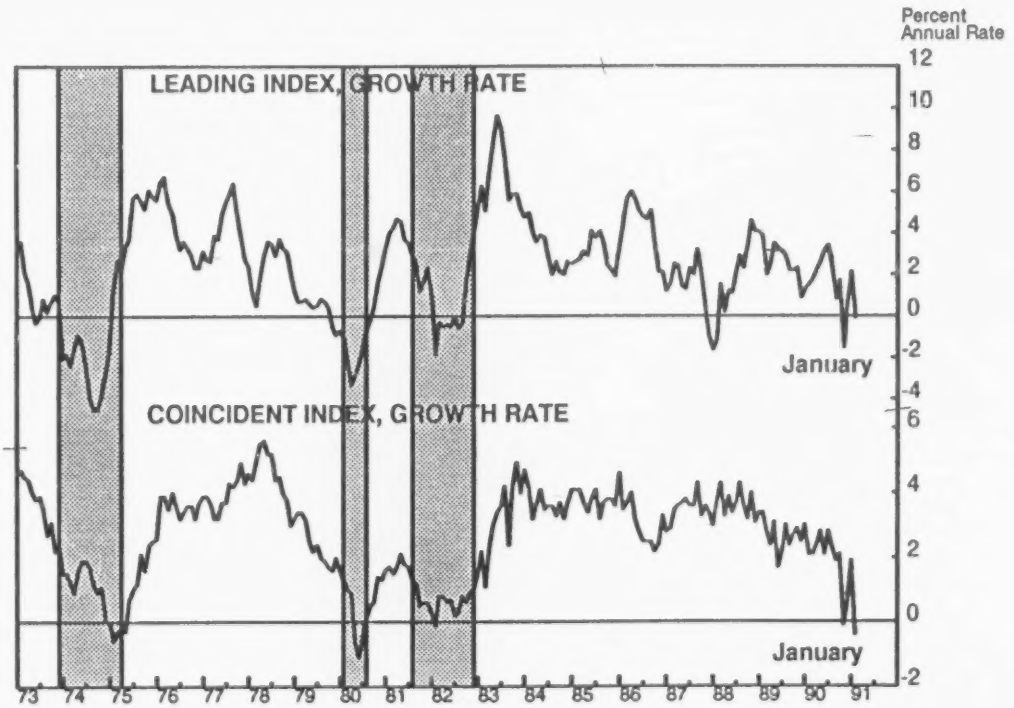
**February 1991**

## SERVICES INDEXES DROPPED SHARPLY

The leading index of service sector activity, compiled by the Columbia Business School's Center for International Business Cycle Research (CIBCR), declined from a revised 166.9 in December to 165.3 in January, pushing its smoothed annualized growth rate down from a revised 2.1% in December to -0.1 in January. The drop was caused by decreases in the average workweek and stock prices for the service sector, partly offset by a rise in construction contracts for commercial buildings.

The coincident index of service sector activity also dropped nearly two points from a revised 193.9 in December to 191.7 in January, while its smoothed annualized growth rate declined from a revised 1.9% in December to -0.4% in January. The drop was caused by decreases in all available components, namely, personal consumption expenditures, labor income, and employee hours in the service sector.

The drop came after the successive rises in both indexes in November and December.




Shaded areas represent business cycle recessions.

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87=100) | Profit Margins, Services (cents per dollar) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1989: | | | | | | |
| Sept. | 163.2 | 2.2 | 32.74 | 832 | 122.1 | 4.37 |
| Oct. | 163.6 | 2.3 | 32.81 | 849 | 122.6 | 4.29 |
| Nov. | 162.7 | 0.9 | 32.69 | 738r | 120.1 | 4.22 |
| Dec. | 163.2 | 1.3 | 32.69 | 694r | 120.6 | 4.29 |
| 1990: | | | | | | |
| Jan. | 163.6 | 1.5 | 32.61 | 818r | 116.5 | 4.36 |
| Feb. | 164.1 | 1.8 | 32.74 | 738r | 112.1 | 4.44 |
| Mar. | 164.8 | 2.2 | 32.76 | 710r | 114.6 | 4.49 |
| Apr. | 165.5 | 2.6 | 32.81 | 719r | 113.8 | 4.54 |
| May | 166.3r | 3.2r | 32.76 | 738r | 117.3 | 4.59 |
| June | 166.8 | 3.4 | 32.83 | 669r | 121.2 | 4.57 |
| July | 166.2 | 2.3 | 32.78 | 551r | 118.5 | 4.54 |
| Aug. | 165.1 | 0.8 | 32.66 | 577r | 106.0 | 4.51 |
| Sept. | 166.1 | 1.7 | 32.92 | 586r | 100.1 | n.a. |
| Oct. | 163.5r | -1.5r | 32.39 | 580r | 98.0 | n.a. |
| Nov. | 165.4r | 0.6 | 32.63r | 551r | 102.0 | n.a. |
| Dec. | 166.9r | 2.1r | 32.86r | 448r | 107.8 | n.a. |
| 1991: | | | | | | |
| Jan. | 165.3 | -0.1 | 32.42 | 509 | 106.2 | n.a. |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1989: | | | | | | |
| Sept. | 189.2 | 2.7 | 1928.9 | 1316.2 | 696.4 | 112.8 |
| Oct. | 189.9 | 2.9 | 1934.3 | 1319.3 | 698.6 | 113.6 |
| Nov. | 189.9 | 2.5 | 1939.7 | 1318.4 | 698.1 | 113.4 |
| Dec. | 190.8 | 3.0 | 1941.0 | 1333.7 | 700.8 | 113.9 |
| 1990: | | | | | | |
| Jan. | 190.3 | 2.1 | 1942.4 | 1318.8 | 696.6 | 114.6 |
| Feb. | 190.6 | 2.1 | 1943.7 | 1323.2 | 697.6 | 114.6 |
| Mar. | 191.3 | 2.4 | 1946.6 | 1330.5 | 701.5 | 114.9 |
| Apr. | 192.1 | 2.8 | 1949.6 | 1336.9 | 706.0 | 115.5 |
| May | 191.8 | 2.1 | 1952.5 | 1336.6 | 705.1 | 115.0 |
| June | 192.9 | 2.8 | 1957.4 | 1349.1 | 707.6 | 115.8 |
| July | 192.9 | 2.3 | 1962.4 | 1347.7 | 707.2 | 115.6 |
| Aug. | 192.8 | 1.9 | 1967.3 | 1351.5 | 705.3 | 115.2 |
| Sept. | 193.4 | 2.1 | 1969.2r | 1353.2 | 706.9 | 116.3 |
| Oct. | 191.5r | -0.1r | 1971.0r | 1352.3r | 690.1 | 114.4 |
| Nov. | 192.2r | 0.5r | 1972.9r | 1350.9r | 696.7r | 115.2r |
| Dec. | 193.9r | 1.9r | n.a. | 1367.1r | 702.4r | 115.9r |
| 1991: | | | | | | |
| Jan. | 191.7 | -0.4 | n.a. | 1361.0 | 690.7 | 114.4 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

r = revised.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.

4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.

5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.

6. This quarterly series is (1) corporate profits with inventory valuation and without capital consumption adjustments for transportation and public utilities, wholesale and retail trade, finance, insurance and real estate, and services, divided by (2) gross national product for services, both in current dollars as compiled by the Department of Commerce. Quarterly data are interpolated by CIBCR.

9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.

11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.

12. Bureau of Labor Statistics, all employees.

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4/5/91 U1245-3

# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
Columbia University Business School, New York, New York 10027 (212) 280-2916

**Dr. Geoffrey H. Moore, Director**

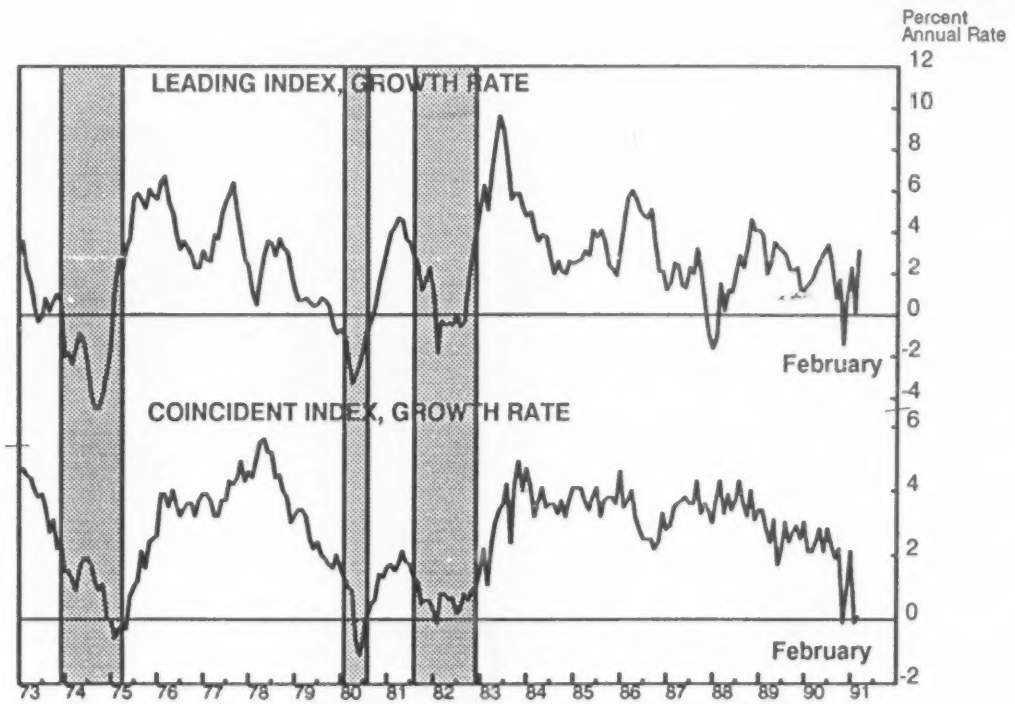
**March 1991**

## SERVICES LEADING INDEX GROWTH JUMPS TO EIGHT-MONTH HIGH

The leading index of service sector activity, compiled by the Columbia Business School's Center for International Business Cycle Research (CIBCR), rose from a revised 165.4 in January to 168.3 in February, while its smoothed annualized growth rate shot up to 3.1% in February from a revised 0.0% in January. The rise was triggered by a sharp rise in stock prices in the service sector, accompanied by smaller rises in construction contracts for commercial buildings and the average workweek in the service sector.

The coincident index of service sector activity registered a much smaller rise, from a revised 192.1 in January to 192.4 in February, pushing its smoothed annualized growth rate to 0.1% in February from -0.1% in January. The rise was caused by small rises in all available components, namely, personal consumption expenditures, labor income, and employee hours in the service sector.

Thus, while growth in the service sector continues to languish, the spurt in the services leading index may be a harbinger of better days ahead.




Shaded areas represent business cycle recessions.

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87=100) | Profit Margins, Services (cents per dollar) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1989: | | | | | | |
| Sept. | 163.2 | 2.2 | 32.74 | 832 | 122.1 | 4.37 |
| Oct. | 163.6 | 2.3 | 32.81 | 849 | 122.6 | 4.29 |
| Nov. | 162.7 | 0.9 | 32.69 | 740r | 120.1 | 4.22 |
| Dec. | 163.2 | 1.2r | 32.69 | 695r | 120.6 | 4.29 |
| 1990: | | | | | | |
| Jan. | 163.6 | 1.5 | 32.61 | 816r | 116.5 | 4.36 |
| Feb. | 164.1 | 1.8 | 32.74 | 742r | 112.1 | 4.44 |
| Mar. | 164.9r | 2.3r | 32.76 | 713r | 114.6 | 4.49 |
| Apr. | 165.6r | 2.7r | 32.81 | 725r | 113.8 | 4.54 |
| May | 166.2r | 3.1r | 32.76 | 733r | 117.3 | 4.59 |
| June | 166.8 | 3.4 | 32.83 | 668r | 121.2 | 4.57 |
| July | 166.2 | 2.3 | 32.78 | 552r | 118.5 | 4.54 |
| Aug. | 165.1 | 0.8 | 32.66 | 576r | 106.0 | 4.51 |
| Sept. | 166.1 | 1.7 | 32.92 | 587r | 100.1 | n.a. |
| Oct. | 163.6r | -1.4r | 32.39 | 586r | 98.0 | n.a. |
| Nov. | 165.6r | 0.9r | 32.63 | 580r | 102.0 | n.a. |
| Dec. | 167.1r | 2.3r | 32.89r | 455r | 107.8 | n.a. |
| 1991: | | | | | | |
| Jan. | 165.4r | 0.0r | 32.45r | 510r | 106.2 | n.a. |
| Feb. | 168.3 | 3.1 | 32.67 | 513 | 118.4 | n.a. |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1989: | | | | | | |
| Sept. | 189.2 | 2.7 | 1928.9 | 1316.2 | 696.4 | 112.8 |
| Oct. | 189.9 | 2.9 | 1934.3 | 1319.3 | 698.6 | 113.6 |
| Nov. | 189.9 | 2.5 | 1939.7 | 1318.4 | 698.1 | 113.4 |
| Dec. | 190.8 | 3.0 | 1941.0 | 1333.7 | 700.8 | 113.9 |
| 1990: | | | | | | |
| Jan. | 190.3 | 2.1 | 1942.4 | 1318.8 | 696.6 | 114.6 |
| Feb. | 190.6 | 2.1 | 1943.7 | 1323.2 | 697.6 | 114.6 |
| Mar. | 191.3 | 2.4 | 1946.6 | 1330.5 | 701.5 | 114.9 |
| Apr. | 192.1 | 2.8 | 1949.6 | 1336.9 | 706.0 | 115.5 |
| May | 191.8 | 2.1 | 1952.5 | 1336.6 | 705.1 | 115.0 |
| June | 192.9 | 2.8 | 1957.4 | 1349.1 | 707.6 | 115.8 |
| July | 192.9 | 2.3 | 1962.4 | 1347.7 | 707.2 | 115.6 |
| Aug. | 192.8 | 1.9 | 1967.3 | 1351.5 | 705.3 | 115.2 |
| Sept. | 193.5r | 2.2r | 1971.8r | 1353.2 | 706.9 | 116.3 |
| Oct. | 191.5 | -0.1 | 1976.2r | 1351.3r | 690.1 | 114.4 |
| Nov. | 192.5r | 0.8r | 1980.7r | 1353.1r | 696.7 | 115.2 |
| Dec. | 194.1r | 2.1r | n.a. | 1365.8r | 702.8r | 116.0r |
| 1991: | | | | | | |
| Jan. | 192.1r | -0.1r | n.a. | 1363.7r | 691.5r | 114.5r |
| Feb. | 192.4 | 0.1 | n.a. | 1364.1 | 691.8 | 115.1 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

r = revised.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.

4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.

5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.

6. This quarterly series is (1) corporate profits with inventory valuation and without capital consumption adjustments for transportation and public utilities, wholesale and retail trade, finance, insurance and real estate, and services, divided by (2) gross national product for services, both in current dollars as compiled by the Department of Commerce. Quarterly data are interpolated by CIBCR.

9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.

11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.

12. Bureau of Labor Statistics, all employees.

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U1245-3

# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
Columbia University Business School, New York, New York 10027 (212) 280-2916

**Dr. Geoffrey H. Moore, Director**

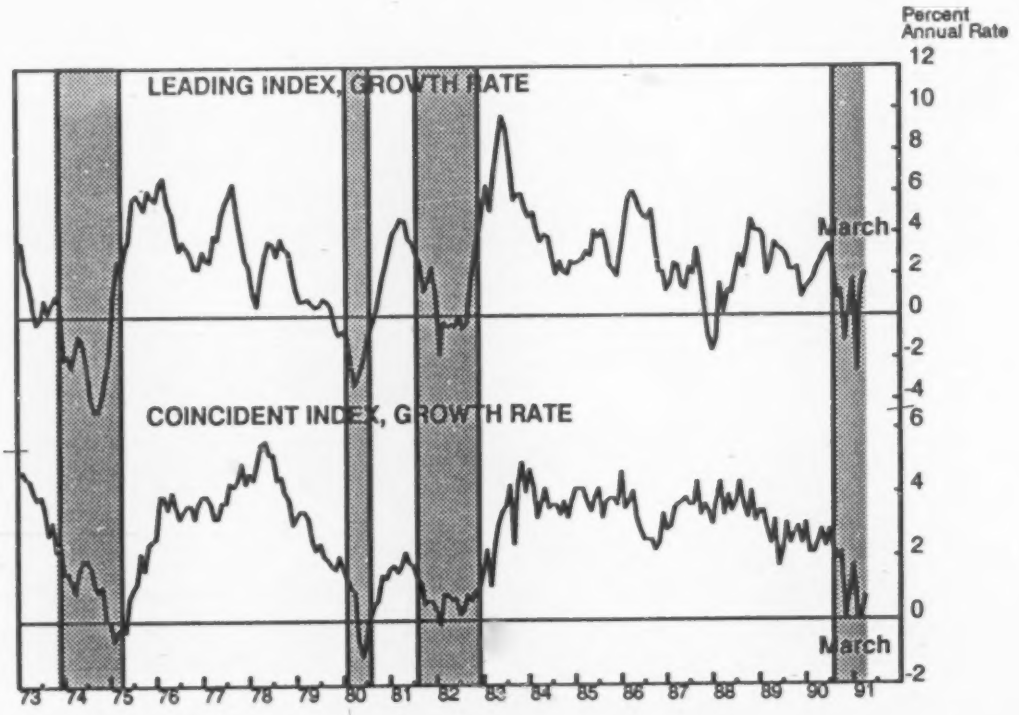
**April 1991**

## FASTER GROWTH IN SERVICES INDEXES

The leading index of service sector activity, compiled by the Columbia Business School's Center for International Business Cycle Research (CIBCR), rose from a revised 166.3 in February to 167.2 in March, while its smoothed annualized growth rate rose from a revised 1.2% in February to 2.0% in March. The index was pushed up by rises in stock prices and the average workweek in services, partly offset by a sharp drop in construction contracts for commercial buildings.

The coincident index of service sector activity also rose, from 192.4 in February to 193.2 in March, carrying its annualized growth rate up from 0.1% in February to 0.7% in March. The advance was caused by increases in labor income and personal consumption expenditures in services, offset in part by a drop in service employee hours.

While the rises in the indexes are positive signs, they are not yet strong enough to signal a cyclical upturn in the growth of the service sector.




Shaded areas represent business cycle recessions.

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87=100) | Profit Margins, Services (cents per dollar) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1990: | | | | | | |
| Jan. | 163.6 | 1.5 | 32.61 | 816 | 116.5 | 4.36 |
| Feb. | 164.1 | 1.8 | 32.74 | 742 | 112.1 | 4.44 |
| Mar. | 164.9 | 2.3 | 32.76 | 718r | 114.6 | 4.49 |
| Apr. | 165.6 | 2.7 | 32.81 | 730r | 113.8 | 4.54 |
| May | 166.2 | 3.1 | 32.76 | 737r | 117.3 | 4.59 |
| June | 166.8 | 3.4 | 32.83 | 670r | 121.2 | 4.57 |
| July | 166.3r | 2.4r | 32.78 | 570r | 118.5 | 4.54 |
| Aug. | 165.1 | 0.8 | 32.66 | 576 | 106.0 | 4.51 |
| Sept. | 165.7r | 1.2r | 32.92 | 589r | 100.1 | 4.45 |
| Oct. | 163.7r | -1.2r | 32.39 | 584r | 98.0 | 4.39 |
| Nov. | 165.1r | 0.3r | 32.63 | 595r | 102.0 | 4.33 |
| Dec. | 166.5r | 1.7r | 32.89 | 458r | 107.8 | n.a. |
| 1991: | | | | | | |
| Jan. | 163.0r | -2.6r | 32.10r | 503r | 106.2 | n.a. |
| Feb. | 166.3r | 1.2r | 32.40r | 515r | 118.4 | n.a. |
| Mar. | 167.2 | 2.0 | 32.58 | 437 | 120.4 | n.a. |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1990: | | | | | | |
| Jan. | 190.3 | 2.1 | 1942.4 | 1318.8 | 697.2r | 114.6 |
| Feb. | 190.6 | 2.1 | 1943.7 | 1323.2 | 698.1r | 114.6 |
| Mar. | 191.3 | 2.4 | 1946.6 | 1330.5 | 702.6r | 114.9 |
| Apr. | 192.1 | 2.8 | 1949.6 | 1336.9 | 706.6r | 115.5 |
| May | 191.9r | 2.3r | 1952.5 | 1336.6 | 705.7r | 115.0 |
| June | 192.9 | 2.8 | 1957.4 | 1349.1 | 707.6 | 115.8 |
| July | 192.8r | 2.2r | 1962.4 | 1347.7 | 707.2 | 115.6 |
| Aug. | 192.8 | 1.9 | 1967.3 | 1351.5 | 704.8r | 115.2 |
| Sept. | 193.4r | 2.1r | 1971.8 | 1353.2 | 706.4r | 116.3 |
| Oct. | 191.5 | 0.0r | 1976.2 | 1351.3 | 689.6r | 114.4 |
| Nov. | 192.4r | 0.7r | 1980.7 | 1353.1 | 696.1r | 115.2 |
| Dec. | 193.7r | 1.7r | 1984.5 | 1365.8 | 702.3r | 116.0 |
| 1991: | | | | | | |
| Jan. | 192.2r | 0.1r | 1988.3 | 1362.7r | 691.1r | 114.4r |
| Feb. | 192.4 | 0.1 | 1992.1 | 1361.1r | 691.0r | 114.9r |
| Mar. | 193.2 | 0.7 | n.a. | 1372.8 | 695.4 | 114.5 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

r = revised.

Col. 4 is revised.

Col. 11 is revised because of a revised seasonal adjustment for the Consumer Price Index.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.

4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.

5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.

6. This quarterly series is (1) corporate profits with inventory valuation and without capital consumption adjustments for transportation and public utilities, wholesale and retail trade, finance, insurance and real estate, and services, divided by (2) gross national product for services, both in current dollars as compiled by the Department of Commerce. Quarterly data are interpolated by CIBCR.

9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.

11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.

12. Bureau of Labor Statistics, all employees.

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U1245-3

# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
Columbia University Business School, New York, New York 10027 (212) 280-2916

**Dr. Geoffrey H. Moore, Director**

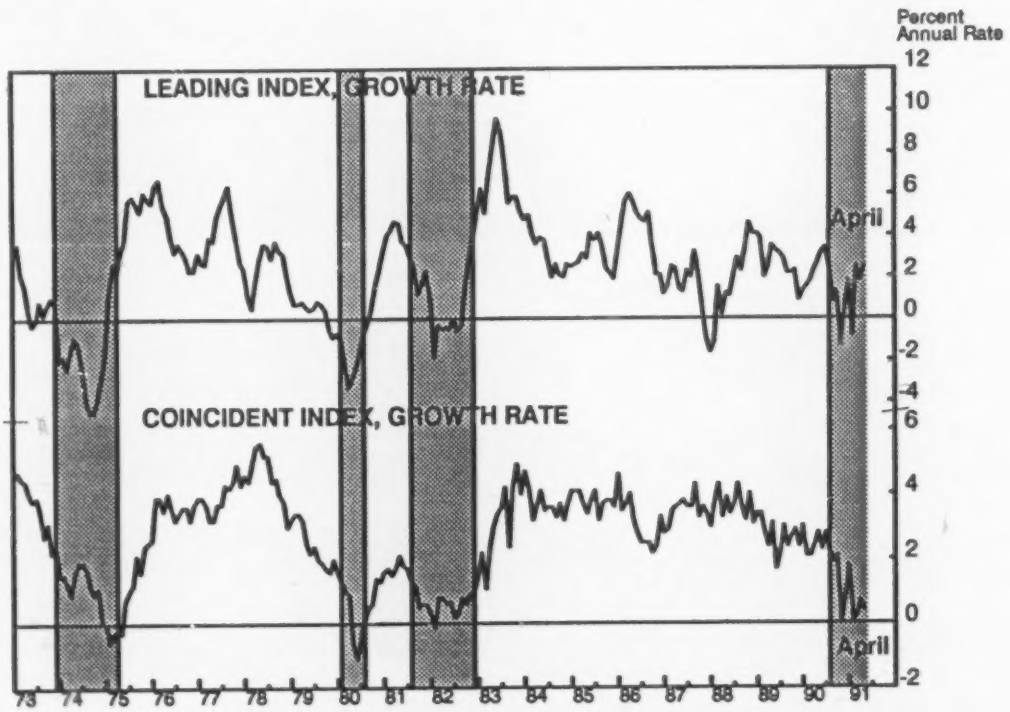
**May 1991**

## SERVICES LEADING INDEX RISES

The leading index of service sector activity, compiled by the Columbia Business School's Center for International Business Cycle Research (CIBCR), rose from a revised 167.3 in March to 168.1 in April, while its annualized growth rate rose from a revised 1.8% in March to 2.5% in April. The index was pushed up by rises in construction contracts for commercial buildings and in stock prices in services, offset in part by a drop in the average workweek in services.

But the coincident index of service sector activity confirmed that services activity was not yet out of the doldrums, as it retreated to 193.1 in April from 193.2 in March, while its smoothed annualized growth rate fell from 0.7% in March to 0.4% in April. The drop was caused by declines in labor income and employee hours in services, partly offset by a rise in personal consumption expenditures in the service sector.

The rise in the leading index is encouraging, but needs to be followed by stronger advances to signal a healthy recovery in the service sector.




Shaded areas represent business cycle recessions.

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967-100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87-100) | Profit Margins, Services (cents per dollar) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1990: | | | | | | |
| Jan. | 163.6 | 1.5 | 32.61 | 824r | 116.5 | 4.36 |
| Feb. | 164.1 | 1.8 | 32.74 | 746r | 112.1 | 4.44 |
| Mar. | 164.9 | 2.3 | 32.76 | 719r | 114.6 | 4.49 |
| Apr. | 165.6 | 2.7 | 32.81 | 738r | 113.8 | 4.54 |
| May | 166.3r | 3.2r | 32.76 | 743r | 117.3 | 4.59 |
| June | 166.8 | 3.4 | 32.83 | 670 | 121.2 | 4.57 |
| July | 166.3 | 2.4 | 32.78 | 579r | 118.5 | 4.54 |
| Aug. | 165.1 | 0.8 | 32.66 | 590r | 106.0 | 4.51 |
| Sept. | 165.8r | 1.3r | 32.92 | 595r | 100.1 | 4.45 |
| Oct. | 163.7 | -1.3r | 32.39 | 585r | 98.0 | 4.39 |
| Nov. | 165.1 | 0.3 | 32.63 | 598r | 102.0 | 4.33 |
| Dec. | 166.6r | 1.8r | 32.89 | 466r | 107.8 | n.a. |
| 1991: | | | | | | |
| Jan. | 164.6r | -0.8r | 32.41r | 499r | 106.2 | n.a. |
| Feb. | 167.6r | 2.5r | 32.64r | 517r | 118.4 | n.a. |
| Mar. | 167.3r | 1.8r | 32.60r | 438r | 120.4 | n.a. |
| Apr. | 168.1 | 2.5 | 32.46 | 545 | 124.1 | n.a. |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967-100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1990: | | | | | | |
| Jan. | 190.3 | 2.1 | 1942.4 | 1318.8 | 697.2 | 114.6 |
| Feb. | 190.6 | 2.1 | 1943.7 | 1323.2 | 698.1 | 114.6 |
| Mar. | 191.3 | 2.4 | 1946.6 | 1330.5 | 702.6 | 114.9 |
| Apr. | 192.1 | 2.8 | 1949.6 | 1336.9 | 706.6 | 115.5 |
| May | 191.9 | 2.3 | 1952.5 | 1336.6 | 705.7 | 115.0 |
| June | 192.9 | 2.8 | 1957.4 | 1349.1 | 707.6 | 115.8 |
| July | 192.8 | 2.2 | 1962.4 | 1347.7 | 707.2 | 115.6 |
| Aug. | 192.8 | 1.9 | 1967.3 | 1351.5 | 704.8 | 115.2 |
| Sept. | 193.4 | 2.1 | 1971.8 | 1353.2 | 706.4 | 116.3 |
| Oct. | 191.5 | 0.0 | 1976.2 | 1351.3 | 689.6 | 114.4 |
| Nov. | 192.4 | 0.7 | 1980.7 | 1353.1 | 696.1 | 115.2 |
| Dec. | 193.8r | 1.8r | 1984.9r | 1365.8 | 702.3 | 116.0 |
| 1991: | | | | | | |
| Jan. | 192.3r | 0.1 | 1989.2r | 1363.5r | 691.1 | 114.4r |
| Feb. | 192.5r | 0.2r | 1993.4r | 1362.2r | 691.0 | 114.9r |
| Mar. | 193.2 | 0.7 | n.a. | 1374.4r | 695.0r | 114.5 |
| Apr. | 193.1 | 0.4 | n.a. | 1381.2 | 692.3 | 114.1 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

r = revised.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.

4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.

5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.

6. This quarterly series is (1) corporate profits with inventory valuation and without capital consumption adjustments for transportation and public utilities, wholesale and retail trade, finance, insurance and real estate, and services, divided by (2) gross national product for services, both in current dollars as compiled by the Department of Commerce. Quarterly data are interpolated by CIBCR.

9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.

11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.

12. Bureau of Labor Statistics, all employees.

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U1245-3

# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
Columbia University Business School, New York, New York 10027 (212) 280-2916

**Dr. Geoffrey H. Moore, Director**

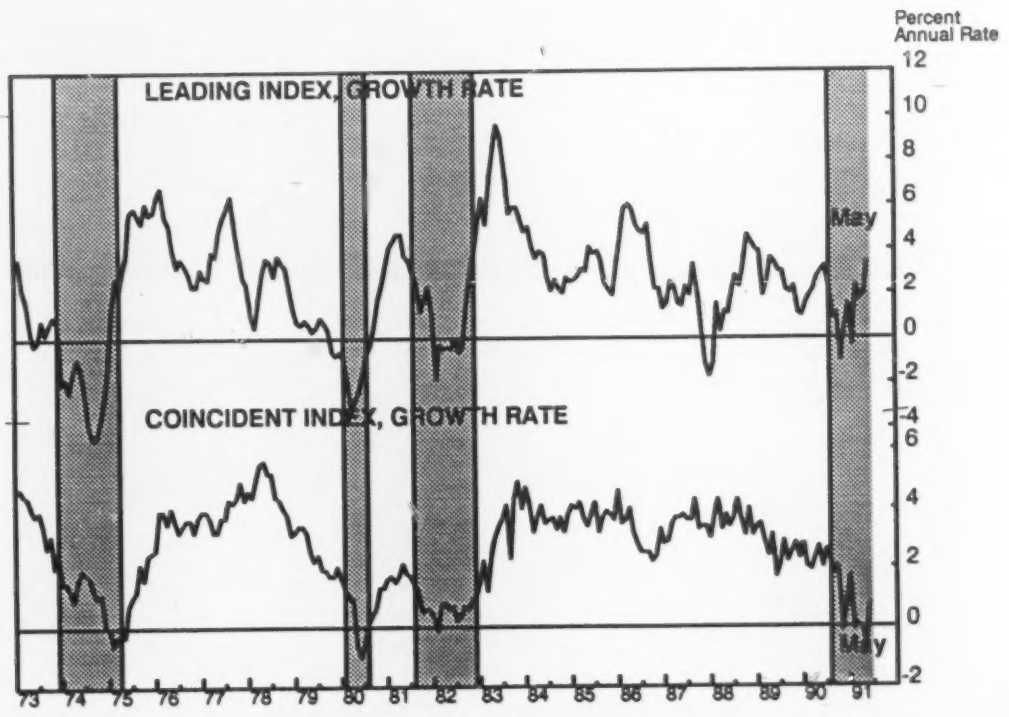
**June 1991**

## SERVICES INDEXES POST SOLID ADVANCES

The leading index of service sector activity, compiled by the Columbia Business School's Center for International Business Cycle Research (CIBCR), rose from a revised 167.5 in April to 169.0 in May, raising its annualized growth rate from a revised 1.9% in April to 3.4% in May. The rise was caused by an increase in the average workweek in services, partly offset by relatively small declines in construction contracts for commercial buildings and stock prices in services.

CIBCR's coincident index of service sector activity also rose, from a revised 191.5 in April to 193.0 in May, carrying its smoothed annualized growth rate from a revised -0.6% in April to 0.8% in May. The rise was caused by increases in all available components of the index -- personal consumption expenditures, labor income, and employee hours in services.

This shows that service sector activity has bottomed out, and is now poised for healthy growth.




Shaded areas represent business cycle recessions.

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87=100) | Profit Margins, Services (cents per dollar) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1990: | | | | | | |
| Jan. | 163.6 | 1.5 | 32.61 | 826r | 116.5 | 4.36 |
| Feb. | 164.1 | 1.9r | 32.72r | 747r | 112.1 | 4.44 |
| Mar. | 164.6r | 2.1r | 32.70r | 720r | 114.6 | 4.49 |
| Apr. | 165.5r | 2.7 | 32.77r | 738 | 113.8 | 4.54 |
| May | 166.0r | 3.0r | 32.70r | 733r | 117.3 | 4.59 |
| June | 166.5r | 3.2r | 32.74r | 671r | 121.2 | 4.57 |
| July | 166.1r | 2.3r | 32.73r | 583r | 118.5 | 4.54 |
| Aug. | 165.1 | 0.9r | 32.65r | 597r | 106.0 | 4.51 |
| Sept. | 165.5r | 1.1r | 32.86r | 595 | 100.1 | 4.45 |
| Oct. | 163.8r | -1.0r | 32.44r | 587r | 98.0 | 4.39 |
| Nov. | 165.1 | 0.4r | 32.64r | 597r | 102.0 | 4.33 |
| Dec. | 166.2r | 1.5r | 32.84r | 466 | 107.8 | 4.35r |
| 1991: | | | | | | |
| Jan. | 164.9r | -0.3r | 32.38r | 499 | 106.2 | 4.38r |
| Feb. | 167.4r | 2.4r | 32.60r | 526r | 118.4 | 4.40r |
| Mar. | 167.1r | 1.7r | 32.56r | 437r | 120.4 | n.a. |
| Apr. | 167.5r | 1.9r | 32.35r | 545 | 124.1 | n.a. |
| May | 169.0 | 3.4 | 32.67 | 488 | 122.5 | n.a. |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1990: | | | | | | |
| Jan. | 190.1r | 2.0r | 1942.4 | 1318.8 | 693.4r | 114.6 |
| Feb. | 190.3r | 1.9r | 1943.7 | 1323.2 | 694.4r | 114.6 |
| Mar. | 191.0r | 2.3r | 1946.6 | 1330.5 | 698.0r | 114.9 |
| Apr. | 191.8r | 2.7r | 1949.6 | 1336.9 | 702.1r | 115.5 |
| May | 191.5r | 2.0r | 1952.5 | 1336.6 | 700.8r | 115.0 |
| June | 192.5r | 2.6r | 1957.4 | 1349.1 | 702.4r | 115.8 |
| July | 192.5r | 2.2 | 1962.4 | 1347.7 | 701.7r | 115.6 |
| Aug. | 192.4r | 1.8r | 1967.3 | 1351.5 | 699.7r | 115.2 |
| Sept. | 193.0r | 2.0r | 1971.8 | 1353.2 | 700.5r | 116.3 |
| Oct. | 191.1r | -0.1r | 1976.2 | 1351.3 | 683.7r | 114.4 |
| Nov. | 192.0r | 0.6r | 1980.7 | 1353.1 | 690.3r | 115.2 |
| Dec. | 193.3r | 1.7r | 1984.8r | 1365.8 | 696.1r | 116.0 |
| 1991: | | | | | | |
| Jan. | 191.7r | -0.1r | 1988.9r | 1360.8r | 685.1r | 114.4 |
| Feb. | 192.0r | 0.1r | 1993.0r | 1361.1r | 684.8r | 114.9 |
| Mar. | 192.1r | 0.0r | n.a. | 1369.3r | 688.7r | 113.7r |
| Apr. | 191.5r | -0.6r | n.a. | 1374.5r | 685.0r | 112.9r |
| May | 193.0 | 0.8 | n.a. | 1382.8 | 690.9 | 113.9 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

r = revised.

Cols. 1,2,3 and 4 are revised because of revisions in Average Workweek and in Construction Contracts.

Cols. 7,8 and 11 are revised because of revisions in Labor Income.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.

4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.

5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.

6. This quarterly series is (1) corporate profits with inventory valuation and without capital consumption adjustments for transportation and public utilities, wholesale and retail trade, finance, insurance and real estate, and services, divided by (2) gross national product for services, both in current dollars as compiled by the Department of Commerce. Quarterly data are interpolated by CIBCR.

9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.

11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.

12. Bureau of Labor Statistics, all employees.

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U12 45-7

# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
Columbia University Business School, New York, New York 10027 (212) 280-2916

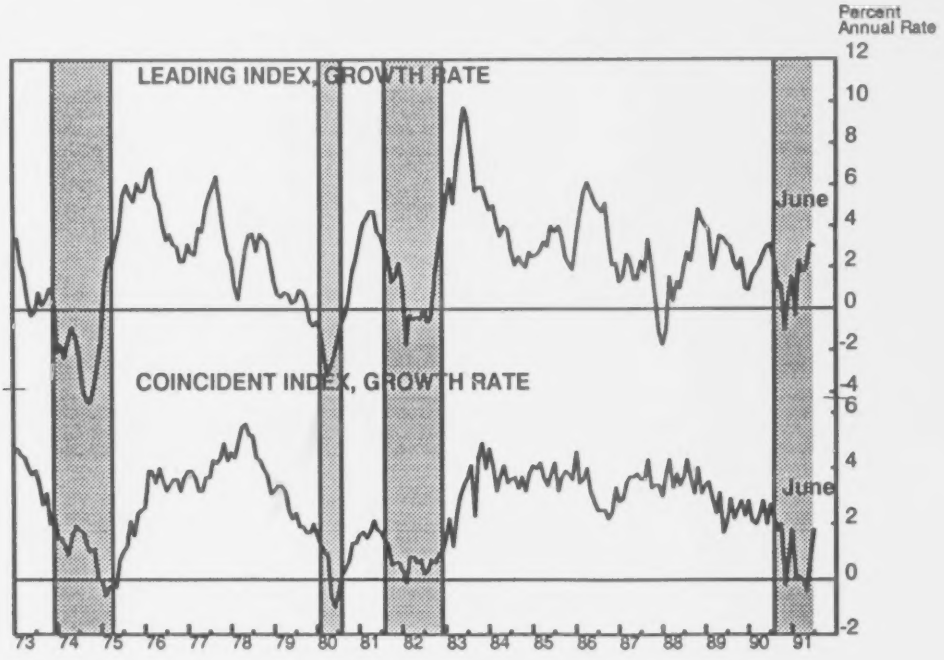
**Dr. Geoffrey H. Moore, Director** **July 1991**

## RECOVERY IN SERVICES INDEXES CLEARLY UNDERWAY

The Leading Index of Service Sector Activity, compiled by the Columbia Business School's Center for International Business Cycle Research (CIBCR), rose from a revised 168.7 in May to 168.8 in June, while its smoothed annualized growth rate slipped marginally to 3.0% in June from a revised 3.1% in May. The index was pushed up by another rise in the average workweek in the service sector, partly offset by a further drop in construction contracts for commercial buildings.

Meanwhile, the Coincident Index of Service Sector Activity rose strongly from a revised 192.9 in May to 194.2 in June, carrying its annualized growth rate up from a revised 0.7% in May to 1.8% in June. The index was pushed up by favorable movements in all four components – a rise in services output in the second quarter, along with advances in employee hours, labor income and personal consumption expenditures in services.

This is clear evidence that the recession in the service sector has ended, and steady if unspectacular growth in services activity is likely in the months ahead.




Shaded areas represent business cycle recessions

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87=100) | Profit Margins, Services (cents per dollar) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1990: | | | | | | |
| Jan. | 162.9r | 1.6r | 32.61 | 826 | 116.5 | 4.36 |
| Feb. | 164.1 | 1.9 | 32.72 | 758r | 112.1 | 4.44 |
| Mar. | 164.6 | 2.1 | 32.70 | 720 | 114.6 | 4.49 |
| Apr. | 165.4r | 2.6r | 32.77 | 738 | 113.8 | 4.54 |
| May | 166.0 | 3.0 | 32.70 | 738r | 117.3 | 4.59 |
| June | 166.4r | 3.1r | 32.74 | 671r | 121.2 | 4.57 |
| July | 166.1 | 2.4r | 32.73 | 584r | 118.5 | 4.54 |
| Aug. | 165.1 | 0.1r | 32.65 | 597 | 106.0 | 4.51 |
| Sept. | 165.5 | 1.2r | 32.86 | 595 | 100.1 | 4.45 |
| Oct. | 163.8 | -1.0 | 32.44 | 584r | 98.0 | 4.39 |
| Nov. | 165.1 | 0.5r | 32.64 | 599r | 102.0 | 4.33 |
| Dec. | 166.2 | 1.5 | 32.84 | 474r | 107.8 | 4.35 |
| 1991: | | | | | | |
| Jan. | 164.9 | -0.3 | 32.38 | 498r | 106.2 | 4.38 |
| Feb. | 167.3r | 2.3r | 32.60 | 526 | 118.4 | 4.40 |
| Mar. | 167.1 | 1.8r | 32.56 | 445r | 120.4 | n.a. |
| Apr. | 167.5 | 2.0r | 32.34r | 561r | 124.1 | n.a. |
| May | 168.7r | 3.1r | 32.63r | 487r | 122.5 | n.a. |
| June | 168.8 | 3.0 | 32.78 | 356 | 122.5 | n.a. |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1990: | | | | | | |
| Jan. | 190.2r | 2.1r | 1942.4 | 1318.8 | 694.5r | 114.6 |
| Feb. | 190.4r | 2.0r | 1943.7 | 1323.2 | 695.4r | 114.6 |
| Mar. | 191.0 | 2.3 | 1946.6 | 1330.5 | 698.0 | 114.9 |
| Apr. | 191.8r | 2.8r | 1949.6 | 1336.9 | 702.7r | 115.5 |
| May | 191.5 | 2.0 | 1952.5 | 1336.6 | 700.8 | 115.0 |
| June | 192.6r | 2.7r | 1957.4 | 1349.1 | 702.9r | 115.8 |
| July | 192.5 | 2.2 | 1962.4 | 1347.7 | 702.6r | 115.6 |
| Aug. | 192.4 | 1.8 | 1967.3 | 1351.5 | 700.0r | 115.2 |
| Sept. | 193.0 | 2.0 | 1971.8 | 1353.2 | 700.0r | 116.3 |
| Oct. | 191.1 | -0.2r | 1976.2 | 1351.3 | 683.2r | 114.4 |
| Nov. | 192.0 | 0.6 | 1980.7 | 1353.1 | 690.3 | 115.2 |
| Dec. | 193.5r | 1.8r | 1984.8 | 1365.8 | 698.2r | 116.0 |
| 1991: | | | | | | |
| Jan. | 191.8r | 0.0 | 1961.3r | 1360.8 | 686.2r | 114.4 |
| Feb. | 192.1r | 0.1 | 1988.9r | 1361.1 | 686.3r | 114.9 |
| Mar. | 192.1 | 0.0 | 1993.0 | 1369.3 | 688.7 | 113.7 |
| Apr. | 191.8r | -0.4r | 1996.8 | 1373.4r | 685.0 | 112.9 |
| May | 192.9r | 0.7r | 2000.6 | 1379.6r | 691.8r | 113.8r |
| June | 194.2 | 1.8 | 2004.4 | 1386.4 | 698.5 | 114.5 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

r = revised.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.

4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.

5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.

6. This quarterly series is (1) corporate profits with inventory valuation and without capital consumption adjustments for transportation and public utilities, wholesale and retail trade, finance, insurance and real estate, and services, divided by (2) gross national product for services, both in current dollars as compiled by the Department of Commerce. Quarterly data are interpolated by CIBCR.

9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.

11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.

12. Bureau of Labor Statistics, all employees.

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# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
Columbia University Business School, New York, New York 10027 (212) 280-2916

**Dr. Geoffrey H. Moore, Director**

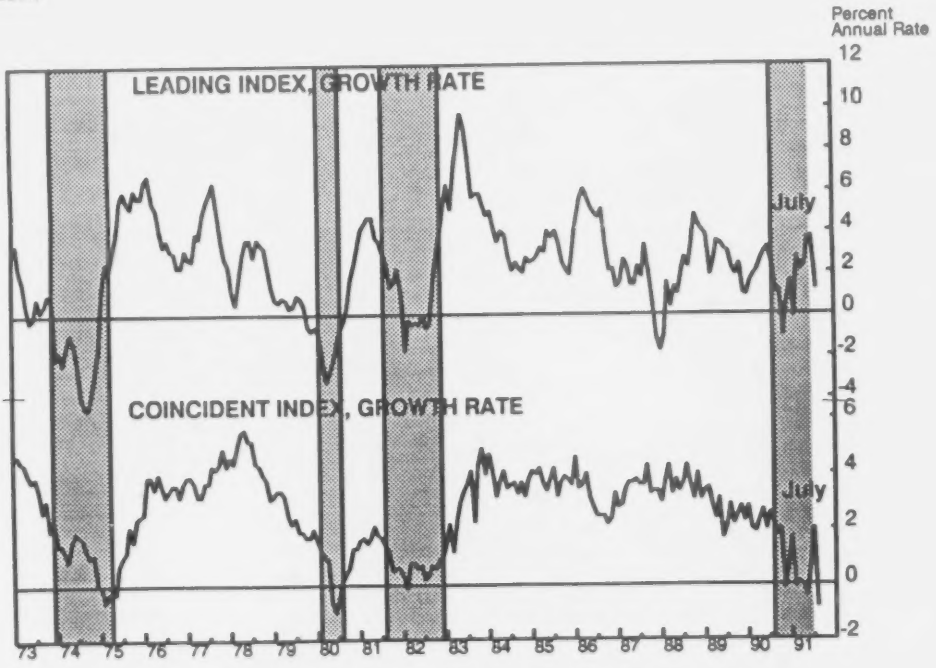
**August 1991**

## SERVICES INDEXES STUMBLE

The Leading Index of Service Sector activity, compiled by Columbia Business School's Center for International Business Cycle Research (CIBCR), fell to 167.7 in July from 169.6 in June, pulling its smoothed annualized growth rate down from a revised 3.7 percent in June to 1.2 percent in July. The dip was caused entirely by a plunge in the average workweek for services to an all-time low, partly offset by rises in construction contracts for commercial buildings and stock prices in the service sector.

CIBCR's Coincident Index of Service Sector activity also fell to 191.6 in July from a revised 194.3 in June, pulling its smoothed annualized growth rate back into negative territory at -0.8 percent from a revised 2.0 percent in June. The decline was caused by drops in employee hours and labor income in services to two-year lows, along with a smaller drop in personal consumption expenditures in the service sector.

It is notable that the major weakness in services stems from employment-related measures and while this is clearly a matter of concern for the health of the nascent recovery, it does not by any means ring its death knell.




Shaded areas represent business cycle recessions.

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87=100) | Profit Margins, Services (cents per dollar) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1990: | | | | | | |
| Jan. | 163.6r | 1.6 | 32.61 | 826 | 116.5 | 4.36 |
| Feb. | 164.1 | 1.9 | 32.72 | 758 | 112.1 | 4.44 |
| Mar. | 164.6 | 2.1 | 32.70 | 720 | 114.6 | 4.49 |
| Apr. | 165.4 | 2.6 | 32.77 | 737r | 113.8 | 4.54 |
| May | 166.0 | 3.0 | 32.70 | 739r | 117.3 | 4.59 |
| June | 166.5r | 3.2r | 32.74 | 673r | 121.2 | 4.57 |
| July | 166.1 | 2.4 | 32.73 | 584 | 118.5 | 4.54 |
| Aug. | 165.1 | 1.0r | 32.65 | 601r | 106.0 | 4.51 |
| Sept. | 165.5 | 1.2 | 32.86 | 596r | 100.1 | 4.45 |
| Oct. | 163.8 | -1.0 | 32.44 | 584 | 98.0 | 4.39 |
| Nov. | 165.1 | 0.5 | 32.64 | 599 | 102.0 | 4.33 |
| Dec. | 166.3r | 1.6r | 32.84 | 470r | 107.8 | 4.38r |
| 1991: | | | | | | |
| Jan. | 165.1r | -0.1r | 32.38 | 496r | 106.2 | 4.44r |
| Feb. | 167.7r | 2.7r | 32.60 | 526 | 118.4 | 4.49r |
| Mar. | 167.5r | 2.1r | 32.56 | 445 | 120.4 | n.a. |
| Apr. | 167.9r | 2.3r | 32.34 | 567r | 124.1 | n.a. |
| May | 169.3r | 3.6r | 32.66r | 501r | 122.5 | n.a. |
| June | 169.6r | 3.7r | 32.86r | 363r | 122.5 | n.a. |
| July | 167.7 | 1.2 | 32.31 | 419 | 122.9 | n.a. |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1990: | | | | | | |
| Jan. | 190.1r | 2.0r | 1942.4 | 1318.8 | 693.4r | 114.6 |
| Feb. | 190.3r | 1.9r | 1943.7 | 1323.2 | 694.4r | 114.6 |
| Mar. | 191.0 | 2.3 | 1946.6 | 1330.5 | 698.0 | 114.9 |
| Apr. | 191.8 | 2.7r | 1949.6 | 1336.9 | 702.1r | 115.5 |
| May | 191.5 | 2.0 | 1952.5 | 1336.6 | 700.8 | 115.0 |
| June | 192.5r | 2.6r | 1957.4 | 1349.1 | 702.4r | 115.8 |
| July | 192.5 | 2.2 | 1962.4 | 1347.7 | 701.7r | 115.6 |
| Aug. | 192.4 | 1.8 | 1967.3 | 1351.5 | 699.7r | 115.2 |
| Sept. | 193.0 | 2.0 | 1971.8 | 1353.2 | 700.5r | 116.3 |
| Oct. | 191.1 | -0.1r | 1976.2 | 1351.3 | 683.7r | 114.4 |
| Nov. | 192.0 | 0.6 | 1980.7 | 1353.1 | 690.3 | 115.2 |
| Dec. | 193.3r | 1.7r | 1984.8 | 1365.8 | 696.1r | 116.0 |
| 1991: | | | | | | |
| Jan. | 191.7r | -0.1r | 1988.9r | 1360.8 | 685.1r | 114.4 |
| Feb. | 192.0r | 0.1 | 1993.0r | 1361.1 | 684.8r | 114.9 |
| Mar. | 192.1 | 0.0 | 1995.7r | 1369.3 | 688.7 | 113.7 |
| Apr. | 191.7r | -0.4 | 1998.5r | 1373.6r | 684.6r | 112.9 |
| May | 192.7r | 0.5r | 2001.2r | 1375.6r | 691.7r | 114.0r |
| June | 194.3r | 2.0r | n.a. | 1383.1r | 699.7r | 114.8r |
| July | 191.6 | -0.8 | n.a. | 1382.1 | 684.2 | 112.7 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

r = revised.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.

4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.

5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.

6. This quarterly series is (1) corporate profits with inventory valuation and without capital consumption adjustments for transportation and public utilities, wholesale and retail trade, finance, insurance and real estate, and services, divided by (2) gross national product for services, both in currant dollars as compiled by the Department of Commerce. Quarterly data are interpolated by CIBCR.

9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.

11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.

12. Bureau of Labor Statistics, all employees.

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C I B C R

# SERVICE SECTOR INDICATORS

Center for International Business Cycle Research
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**Dr. Geoffrey H. Moore, Director**

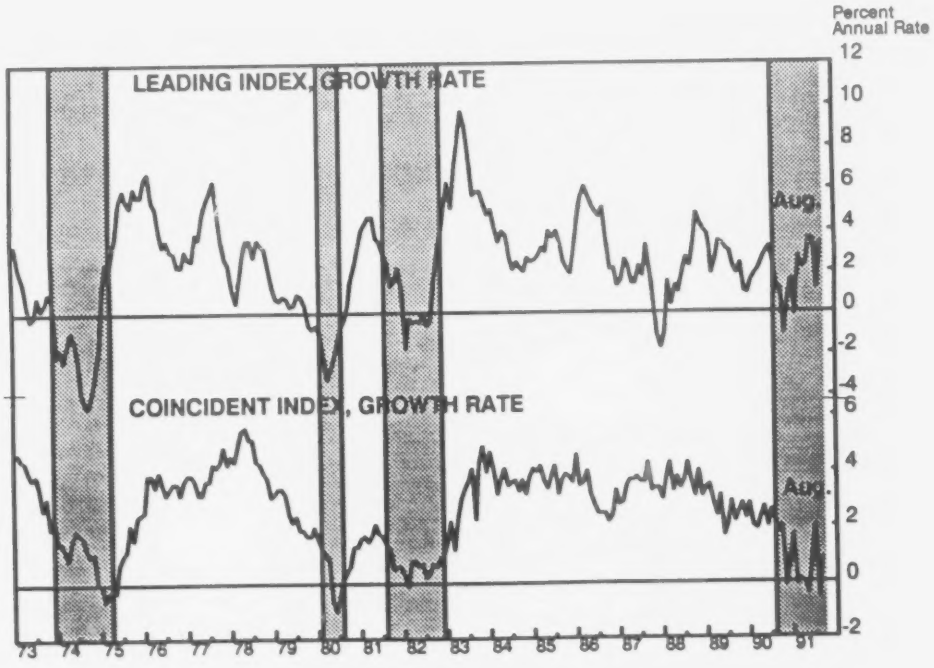
**September 1991**

## SERVICES INDEXES BOUNCE BACK

The Leading Index of Service Sector activity, compiled by Columbia Business School's Center for International Business Cycle Research (CIBCR), rose to 169.8 in August from 167.7 in July, while its smoothed annualized growth rate rose to 3.4% in August from 1.2% in July. The index was pushed up by rises in the average workweek and stock prices in services, and a marginal advance in construction contracts for commercial buildings.

CIBCR's Coincident Index of Service Sector activity also rose, from a revised 191.9 in July to 193.2 in August, while its smoothed annualized growth rate recovered from -0.5% in July to 0.8% in August. The index was pushed up by rises in personal consumption expenditures, labor income, and employee hours in services.

The rise in the indexes is a reassuring sign that, despite recent stumbles, the service sector is on the road to recovery.



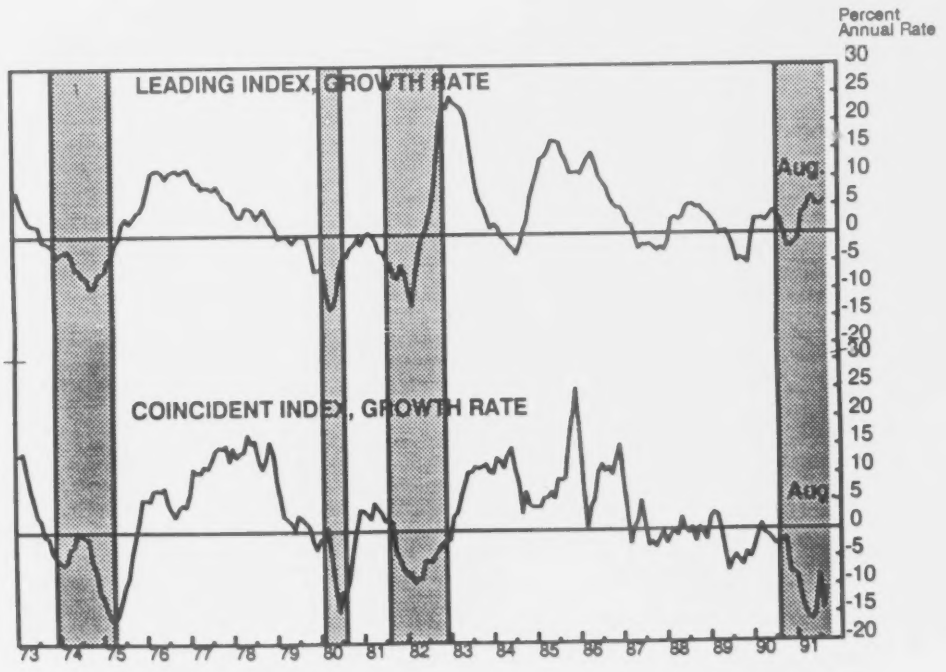

Shaded areas represent business cycle recessions.

## UPBEAT START TO NEW FINANCIAL SERVICES INDEXES

The leading Index of Financial Services activity, just introduced by Columbia University's Center for International Business Cycle Research rose from 203.1 in July to 204.3 in August, while its smoothed annualized growth rate climbed from 4.8% in July to 5.6% in August. The index was pushed up by rises in prices of financial stocks, bond prices, and construction contracts for commercial and industrial buildings, partly offset by declines in deflated money supply M2 and new building permits.

Meanwhile, CIBCR's new Financial Services Coincident Index, which tracks current economic activity in this sector, rose from 159.5 in July to 161.0 in August, while its smoothed annualized growth rate recovered from -14.3% in July to -10.9% in August. The recovery in the index was helped by a rise in aggregate weekly hours in Finance, Insurance, and Real Estate (F.I.R.E.), but hurt by a rise in the unemployment rate in those industries.

*The new indexes show that the financial services sector is still in the grip of its worst recession in sixteen years, but there are clear signals from the Leading Index that this sector will follow the national economy into a recovery in the coming months.*




Shaded areas represent business cycle recessions.

## LEADING INDEX OF SERVICES, AND COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Average Workweek, Services (hours) | Construction Contracts, Commercial Buildings (mil. sq. ft., ann. rate) | S&P Stock Price Index, Services, (Mar. 87=100) | Profit Margins, Services (cents per dollar) |
|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. |
| 1990: | | | | | | |
| Jan. | 163.6 | 1.6 | 32.61 | 827r | 116.5 | 4.36 |
| Feb. | 164.1 | 1.9 | 32.72 | 758 | 112.1 | 4.44 |
| Mar. | 164.6 | 2.1 | 32.70 | 720 | 114.6 | 4.49 |
| Apr. | 165.4 | 2.6 | 32.77 | 737 | 113.8 | 4.54 |
| May | 166.0 | 3.0 | 32.70 | 739 | 117.3 | 4.59 |
| June | 166.5 | 3.2 | 32.74 | 673 | 121.2 | 4.57 |
| July | 166.1 | 2.4 | 32 73 | 585r | 118.5 | 4.54 |
| Aug. | 165.1 | 1.0 | 32.65 | 601 | 106.0 | 4.51 |
| Sept. | 165.5 | 1.2 | 32.86 | 598r | 100.1 | 4.45 |
| Oct. | 163.8 | -1.0 | 32.44 | 589r | 98.0 | 4.39 |
| Nov. | 165.1 | 0.5 | 32.64 | 600r | 102.0 | 4.33 |
| Dec. | 166.3 | 1.6 | 32.84 | 475r | 107.8 | 4.38 |
| 1991: | | | | | | |
| Jan. | 165.1 | -0.1 | 32.38 | 496 | 106.2 | 4.44 |
| Feb. | 167.7 | 2.7 | 32.60 | 528r | 118.4 | 4.49 |
| Mar. | 167.6r | 2.2r | 32.56 | 443r | 120.4 | 4.49r |
| Apr. | 168.0r | 2.4r | 32.34 | 565r | 124.1 | 4.49r |
| May | 169.3 | 3.6 | 32.66 | 510r | 122.5 | 4.49r |
| June | 169.5r | 3.5r | 32.87r | 368r | 122.5 | n.a. |
| July | 167.7 | 1.2 | 32.35r | 419 | 122.9 | n.a. |
| Aug. | 169.8 | 3.4 | 32.60 | 420 | 126.8 | n.a. |

## COINCIDENT INDEX OF SERVICES, AND COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Services Output, GNP (bil. 1982$, ann. rate) | Services, Personal Consumption Expenditures (bil. 1982$, ann. rate) | Services Labor Income (bil. 1982-84$ ann. rate) | Service Employee Hours (bil., ann. rate) |
|---|---|---|---|---|---|---|
| | 7. | 8. | 9. | 10. | 11. | 12. |
| 1990: | | | | | | |
| Jan. | 190.1 | 2.0 | 1942.4 | 1318.8 | 693.4 | 114.6 |
| Feb. | 190.3 | 1.9 | 1943.7 | 1323.2 | 694.4 | 114.6 |
| Mar. | 191.0 | 2.3 | 1946.6 | 1330.5 | 698.0 | 114.9 |
| Apr. | 191.8 | 2.7 | 1949.6 | 1336.9 | 702.1 | 115.5 |
| May | 191.5 | 2.0 | 1952.5 | 1336.6 | 700.8 | 115.0 |
| June | 192.5 | 2.6 | 1957.4 | 1349.1 | 702.4 | 115.8 |
| July | 192.5 | 2.2 | 1962.4 | 1347.7 | 701.7 | 115.6 |
| Aug. | 192.4 | 1.8 | 1967.3 | 1351.5 | 699.7 | 115.2 |
| Sept. | 193.0 | 2.0 | 1971.8 | 1353.2 | 700.5 | 116.3 |
| Oct. | 191.1 | -0.1 | 1976.2 | 1351.3 | 683.7 | 114.4 |
| Nov. | 192.0 | 0.6 | 1980.7 | 1353.1 | 690.3 | 115.2 |
| Dec. | 193.3 | 1.7 | 1984.8 | 1365.8 | 696.1 | 116.0 |
| 1991: | | | | | | |
| Jan. | 191.7 | -0.1 | 1988.9 | 1360.8 | 685.1 | 114.4 |
| Feb. | 192.0 | 0.1 | 1993.0 | 1361.1 | 684.8 | 114.9 |
| Mar. | 192.1 | 0.0 | 1996.1r | 1369.3 | 688.7 | 113.7 |
| Apr. | 191.7 | -0.4 | 1999.1r | 1373.2r | 684.6 | 112.9 |
| May | 192.8r | 0.6r | 2002.2r | 1376.4r | 691.7 | 114.0 |
| June | 194.3 | 2.0 | n.a. | 1381.2r | 699.7 | 114.8 |
| July | 191.9r | -0.5r | n.a. | 1380.9r | 685.3r | 113.1r |
| Aug. | 193.2 | 0.8 | n.a. | 1386.7 | 693.7 | 113.6 |

Note: Cols. 2 and 8. The growth rates are six-month smoothed percent changes at annual rate, based on the ratio of the current month's index to the average for the preceding twelve months.

r = revised.

Sources: 3. Bureau of Labor Statistics, Production and non-supervisory workers.
4. McGraw-Hill Company, F.W. Dodge Division. Seasonally adjusted by CIBCR.
5. Standard & Poor's Corporation indexes for 13 service industries, compiled by CIBCR.
6. This quarterly series is (1) corporate profits with inventory valuation and without capital consumption adjustments for transportation and public utilities, wholesale and retail trade, finance, insurance and real estate, and services, divided by (2) gross national product for services, both in current dollars as compiled by the Department of Commerce. Quarterly data are interpolated by CIBCR.
9, 10. Department of Commerce, Bureau of Economic Analysis. Quarterly data for output are interpolated by CIBCR.
11. Bureau of Labor Statistics. Payroll index, 1977 = 100, converted to 1982-84 dollars by CIBCR, using CPI, All Urban Consumers, seasonally adjusted.
12. Bureau of Labor Statistics, all employees.

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## FINANCIAL SERVICES: LEADING COMPONENTS

| | Leading Index* (1967=100) | Leading Index Growth Rate (%) | Dow Jones Bond Prices, 20 bonds (% Face Value) | Money Supply (M2), Deflated (Bil. 1982$) | New Building Permits, Housing (1967=100) | S&P Stock Price Index, 40 Financials | Construction Contracts, Comm. & Ind. Buildings (Mil. sq. ft.) | Corp. Profits w/IVA & CCA Finance (Bil. $) |
|---|---|---|---|---|---|---|---|---|
| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
| 1990: | | | | | | | | |
| Jan. | 196.9 | 2.5 | 92.23 | 2446.0 | 140.2 | 29.68 | 72.59 | 19.3 |
| Feb. | 196.8 | 2.4 | 91.13 | 2451.1 | 107.1 | 28.17 | 67.44 | 19.3 |
| Mar. | 196.9 | 2.6 | 90.64 | 2451.0 | 96.1 | 28.50 | 68.19 | 19.3 |
| Apr. | 196.5 | 2.1 | 89.99 | 2453.2 | 89.6 | 27.53 | 64.01 | 21.8 |
| May | 197.4 | 3.0 | 89.59 | 2451.7 | 86.8 | 28.73 | 65.14 | 21.8 |
| June | 198.4 | 3.9 | 90.83 | 2442.9 | 89.6 | 29.84 | 57.86 | 21.8 |
| July | 198.1 | 3.4 | 91.11 | 2437.5 | 86.6 | 28.46 | 52.04 | 24.3 |
| Aug. | 197.1 | 2.2 | 90.34 | 2426.5 | 84.1 | 24.88 | 54.43 | 24.3 |
| Sept. | 195.2 | -0.1 | 89.22 | 2417.6 | 78.9 | 22.57 | 57.76 | 24.3 |
| Oct. | 192.9 | -2.5 | 89.03 | 2405.7 | 73.8 | 20.07 | 53.26 | 21.7 |
| Nov. | 193.2 | -2.4 | 89.77 | 2396.5 | 73.0 | 21.52 | 54.97 | 21.7 |
| Dec. | 194.3 | -1.7 | 91.28 | 2392.7 | 68.1 | 23.53 | 46.25 | 21.7 |
| 1991: | | | | | | | | |
| Jan. | 195.2 | -0.9 | 91.94 | 2385.0 | 64.0 | 23.20 | 50.14 | 25.6 |
| Feb. | 199.8 | 3.6 | 94.09 | 2396.6 | 69.9 | 27.75 | 54.86 | 25.6 |
| Mar. | 200.5 | 4.0 | 93.60 | 2413.1 | 71.1 | 28.64 | 44.82 | 25.6 |
| Apr. | 202.8 | 5.9 | 94.00 | 2413.9 | 72.8 | 30.27 | 51.98 | 28.5 |
| May | 203.8 | 6.4 | 94.81 | 2416.2 | 77.0 | 29.81 | 47.11 | 28.5 |
| June | 203.0 | 5.1 | 94.29 | 2414.5 | 79.7 | 30.18 | 36.51 | 28.5 |
| July | 203.1 | 4.8 | 94.48 | 2401.6 | 80.1 | 29.89 | 39.12 | ... |
| Aug. | 204.3 | 5.6 | 95.64 | 2395.1 | 76.0 | 31.48 | 42.85 | ... |

## FINANCIAL SERVICES: COINCIDENT COMPONENTS

| | Coincident Index* (1967=100) | Coincident Index Growth Rate (%) | Unemployment Rate, Finance & Services | Total Net Credit Market Borrowing, Deflated, All Sectors (Bil.$, ann. rate) | National Income, w/o CCA, Deflated, F.I.R.E.** (Bil.$) | Index of Aggregate weekly hours F.I.R.E.** (1982=100) |
|---|---|---|---|---|---|---|
| | 9. | 10. | 11. | 12. | 13. | 14. |
| 1990: | | | | | | |
| Jan. | 188.7 | -1.2 | 4.3 | 785.674 | 494.200 | 120.3 |
| Feb. | 190.0 | 0.8 | 4.4 | 781.997 | 491.888 | 120.6 |
| Mar. | 187.7 | -0.8 | 4.5 | 778.959 | 489.977 | 120.5 |
| Apr. | 186.7 | -1.2 | 4.5 | 648.170 | 498.915 | 120.9 |
| May | 185.5 | -2.0 | 4.4 | 647.167 | 498.142 | 121.0 |
| June | 184.5 | -2.8 | 4.5 | 643.184 | 495.077 | 120.6 |
| July | 184.7 | -2.3 | 4.5 | 671.402 | 504.598 | 120.7 |
| Aug. | 184.2 | -2.5 | 4.7 | 665.790 | 500.380 | 120.8 |
| Sept. | 184.8 | -1.7 | 4.7 | 660.769 | 496.606 | 122.3 |
| Oct. | 178.7 | -7.5 | 4.5 | 590.780 | 492.729 | 119.4 |
| Nov. | 177.5 | -8.0 | 4.7 | 589.013 | 491.255 | 120.2 |
| Dec. | 176.5 | -8.3 | 4.8 | 587.258 | 489.791 | 121.6 |
| 1991: | | | | | | |
| Jan. | 171.3 | -12.5 | 4.9 | 418.917 | 483.605 | 120.4 |
| Feb. | 167.8 | -14.5 | 5.0 | 417.987 | 482.531 | 120.2 |
| Mar. | 164.5 | -16.0 | 5.6 | 418.296 | 482.889 | 119.9 |
| Apr. | 162.5 | -16.3 | 5.2 | 373.318 | 483.814 | 118.3 |
| May | 162.2 | -14.8 | 5.7 | 372.218 | 482.387 | 119.7 |
| June | 166.8 | -8.4 | 5.7 | 371.397 | 481.323 | 121.3 |
| July | 159.5 | -14.3 | 5.1 | ... | ... | 117.8 |
| Aug. | 161.0 | -10.9 | 5.5 | ... | ... | 119.2 |

Sources: 3, Wall Street Journal, Barrons.
4. CIBCR, Bureau of Labor Statistics, Dept. Commerce, Federal Reserve Board.
5. Dept. of Commerce, Federal Reserve Board, Bureau of Labor Statistics.
6. Standard & Poor's Corporate Indexes for 13 Service Industries, compiled by CIBCR.
7. F.W. Dodge, McGraw-Hill Information Services.
8. Dept. of Commerce, Quarterly data interpolated by CIBCR.
11. U.S. Dept. of Labor, Bureau of Labor Statistics.
12. Federal Reserve Board, quarterly data interpolated and deflated by CIBCR.
13. Dept. of Commerce, Quarterly data interpolated and deflated by CIBCR.
14. Bureau of Labor Statistics.

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# NEW FINANCIAL SERVICES INDEXES FROM CIBCR

In the U.S. Commerce Department's widely followed Index of Leading Economic Indicators, the service sector is under-represented, though that sector accounts for approximately two-thirds of U.S. GNP. Three years ago, the CIBCR introduced a Leading Index of Service Sector Activity designed to supplement the traditional Leading Index, and remedy this deficiency.

Today, the CIBCR introduces Leading and Coincident Indexes for the critically important Financial Services sector. This sector is a subset of the larger Service Sector and accounts for about 15% of U.S. GNP. The Financial Services Leading Index is designed to predict cyclical upswings and downswings in economic activity in Finance, Insurance, and Real Estate (F.I.R.E.). The Financial Service Coincident Index tracks *current* economic activity in the same industries.

It is hoped that the new Financial Services Indexes, by focusing on a key sector of the U.S. economy, will become an important tool for gaining insights into the driving forces behind U.S. business cycles. The indexes are also expected to help provide valuable advance warning of recessions and recoveries in regional economies, such as the New York metropolitan area, which are heavily dependent on financial service industries.